

ELECTRICAL

POWER & INTEGRATED BUILDING SYSTEMS

2018 PROFILE OF
THE ELECTRICAL
CONTRACTOR
VEHICLES



CONTRACTOR

7.18

**2018 “ELECTRICAL CONTRACTOR MAGAZINE PROFILE”
DATABASE REPORT**

ELECTRICAL CONTRACTORS: THEIR OWNERSHIP, PURCHASE AND LEASE OF VEHICLES

INCLUDING ESTIMATES BASED ON THE 2016 COUNTY BUSINESS PATTERNS

**A SPECIAL REPORT PREPARED BY
RENAISSANCE RESEARCH & CONSULTING, INC.**

FOR:

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KEY FINDINGS

93% of electrical contracting firms have a fleet of one or more vehicles, a statistically significant increase from two years ago when it was 88%. About 7% of the firms answering the vehicles questions report having *no* business vehicles.

- Based on findings from the 2014 Profile study, but not repeated in either 2016 or 2018, we learned that a number of factors go into being “vehicle-less”: some respondents were unable to specify the type of types of vehicles in their fleet but said that they had used a company vehicle to get from job to job. Some said that they themselves are assigned to a single location, so that there is no need (for a vehicle) to travel from job to job. In addition, about one-quarter said that they used a personal vehicle to get from job to job. All of this can be revisited in the future. However, based on these earlier findings, we believe that vehicle usage among electrical contractors is higher than the 93% reported.

In addition, about one half of the electrical contractors that took this portion of the survey said that their firm is considering the purchase or lease/rental of a business vehicle in the next 1-3 years.

By company size: 95% of firms with 1-9 employees and 88% of firms with 10+ employees report fleets with one or more of the vehicles included in the survey. While the percent of small firms with fleets increased significantly to 95% from 89% two years earlier, there is no difference in vehicle ownership among firms with 10+ employees compared with two years earlier.

Types of Vehicles:

- Among small firms (1-9 employees) Vans/Panel trucks and Light Pick-Up trucks are most common.
- Among larger firms (10+ employees) Vans/Panel trucks and Light Pick-Up trucks are also most common followed by Medium/Heavy Pick-Up trucks.
- Vehicles are far more likely to be purchased than leased.

Number of Vehicles: On average, firms report having 5.2 vehicles, statistically unchanged from two years ago.

Estimate of the Number of Vehicles: Based on the survey, ELECTRICAL CONTRACTOR magazine estimates that the universe of electrical contractors had a total fleet of between about **296 million and 408 million vehicles in 2017 at the 90% level of confidence.**^r

^r As will be noted in the Methodology section, we believe that the actual number of vehicles is closer to the top of the range, or possibly even higher because this mean does not include fleets with more than 50 vehicles owned by a small number of the companies in the survey. This was done in order to achieve a tighter confidence band for the estimate. Further, we do not believe that this estimate includes personal vehicles, so that the actual number of vehicles used for business by electrical contractors may well be even higher than the top of the range.

METHODOLOGY

This report focuses on electrical contractors' ownership, purchase and lease of vehicles in 2017. Please note that the Profile study is conducted in even years (2016 or 2014) and asks about the previous year (2015 or 2013).

The survey was conducted by postal mail and via the Internet among a random sample of ELECTRICAL CONTRACTOR subscribers. The field period for the survey began on March 7, 2018 (for both the Internet and postal mail versions), and ended on April 3, which was the deadline for the July 2018 article. A total of 1597 interviews were completed – 901 via the Internet and 696 via postal mail. The data were weighted to equalize the influence of the two modes so that it was in line with the 50/50 split which was the case in the most recent Profile studies.

Each respondent who received the survey via the Internet was sent two follow-up e-mails. However, follow-up mailings were not made to non-responders in the postal mail sample. An incentive was offered for participation in the survey: For each completed survey, ELECTRICAL CONTRACTOR magazine would contribute \$5 to charity, up to a total of \$10,000. For the first time, the magazine also offered a sweepstakes drawing for one of five \$150 Amazon e-gift cards

The Internet option was first introduced in 2004. In 2004 and 2006, the proportion of surveys completed via the Internet versus postal mail was approximately 60/40. Since 2008, the proportion has been closer to 50/50. As noted above, in 2014, the data were weighted to equalize the proportion that participated via postal mail and via the Internet.

In 2014, in order to accommodate a longer list of questions while at the same time lessening the burden on the respondent, the survey was shortened from 5 print pages to 4. In order to accommodate all of the questions, the survey was produced in 8 versions (up from 4). This required a much larger sample size so that each of the questions would be asked of a large enough sample to allow for analysis – particularly by subgroups. These changes provided the opportunity to increase the sample size in certain of the versions in order to provide increased statistical reliability. In 2018 as in 2016, a total of 7 versions of the survey were produced. For this version of the survey, the sample was 214.

As in the past, statistical testing is done at the 90% level of confidence.

For this report, the estimates of market size are based on the 2016 County Business Patterns (CBP).

This research was conducted by New York, NY-based Renaissance Research & Consulting, Inc. (www.renaiss.com), an independent marketing research firm that has, as one of its specialties, market research for the construction industry.

Methodology Notes

As was the case with the 2016 Profile Study, the projected number of vehicles in fleet will be based only on those with between 1 and 49 vehicles.

- Reason for the Change: This is being done to dampen the effect that outliers will have on the mean or average, so that the projections will have a smaller confidence band around them.
 - **Further, since we do not believe that the number of vehicles includes *personal* vehicles, the actual number of vehicles used electrical contractors may well be even higher than the top of the range.**

DETAILED FINDINGS

Types of Vehicles in Respondent's Fleet

The vast majority of electrical contracting firms (93%) have business fleets.

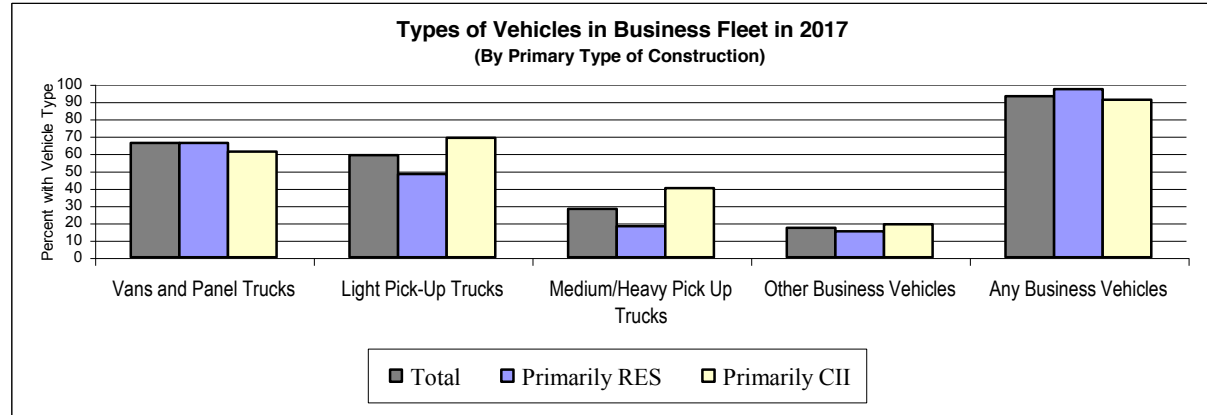
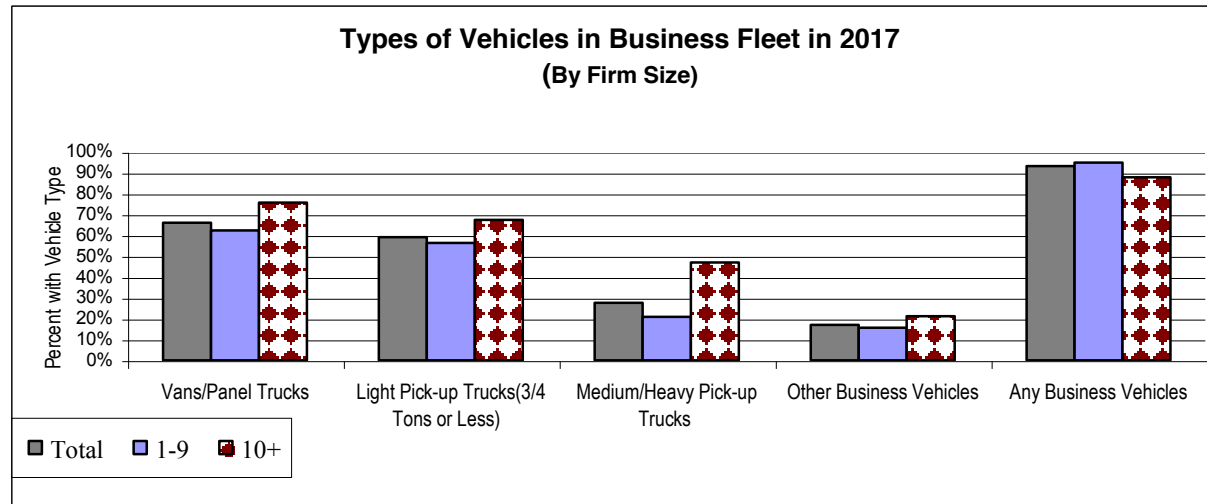
- Among small firms, (1-9 employees) Vans/Panel trucks and Light Pick-Up trucks are most common.
- Among larger firms, Vans/Panel trucks and Light Pick-Up trucks are also most common (about 7 in 10 larger firms report having either or both in their fleets. Almost 5 in 10 large firms report having Medium/Heavy Pick-Up trucks.
- Other Business vehicles receive fewer mentions.
 - Large firms are more likely to own Vans and Panel trucks and Medium/Heavy Pick-Up trucks.

TYPES OF VEHICLES IN BUSINESS FLEET (2017)			
	Total	1-9	10+
	(214)	(157)	(57)
	%	%	%
Vans/Panel Trucks	66	62	<76
Light Pick-Up Trucks	59	56	67
Medium/Heavy Pick Up Trucks	28	21	<47
Other Business Vehicles	17	16	21
Total Business Vehicles	93	95	88

- The fact that not all firms report owning these business vehicles is not new¹.

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- ¹ We explored this in some depth as part of the 2014 Profile Study and found that about 3% were unable to specify the type or types of vehicles in their fleet but said that they used a company vehicle to get from job to job. An additional 3% said that they themselves were assigned to a single location, so that there is no need (for a vehicle) to travel from job to job. There was a small remaining group of about 2% - 3% where the reason for not having a business vehicle was unknown at this point.
 - We also found that about one-quarter of the total who were asked about vehicles used a personal vehicle to get from job to job. Future Profile studies might consider adding questions about use of personal vehicles for business purposes, such as what accommodations, if any, are needed for electrical contractors to use a personal vehicle for business purposes.

The types of vehicles by number of employees and by primarily type of work performed is illustrated below



Among the total sample, a statistically higher percentage of electrical contractors report having a business fleet of vehicles.

There is only one significant difference compared with two years earlier by number of employees:

- More firms with 1-9 employees report fleets with (Any) Business Vehicles compared with two years earlier.

TYPES OF VEHICLES IN BUSINESS FLEET (Trended) by Number of Employees						
	Total		1-9		10+	
	2017	2015	2017	2015	2017	2015
	(214)	(363)	(157)	(278)	(57)	(83)
	%	%	%	%	%	%
Vans/Panel Trucks	66	60	62	57	76	70
Light Pick-Up Trucks	59	60	56	55	67	77
Medium/Heavy Pick Up Trucks	28	27	21	17	47	57
Other Business Vehicles	17	16	16	13	21	26
Any Business Vehicles	93>	88	95>	89	88	86

- More firms that work primarily on Residential projects report fleets with Vans/Panel trucks and (Any) Business Vehicles compared with two years earlier.

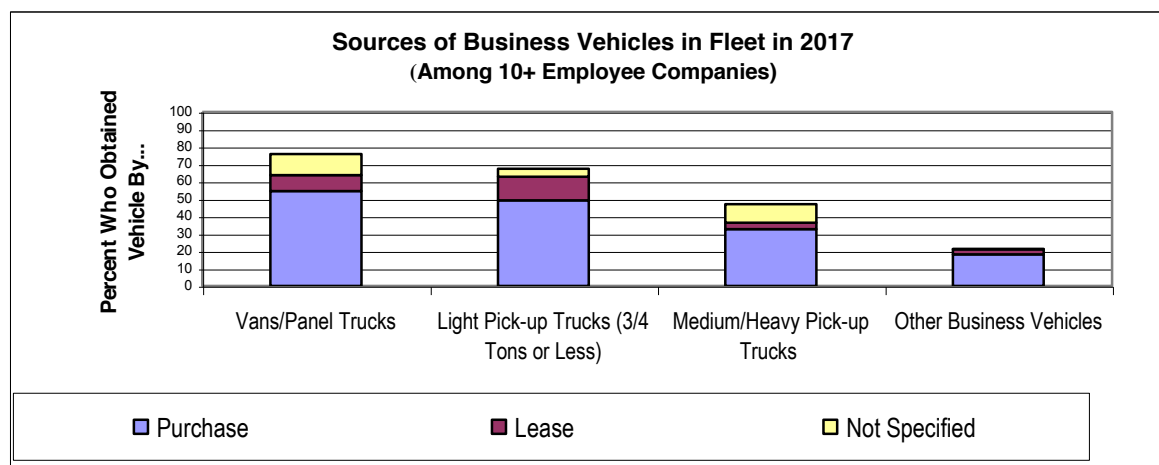
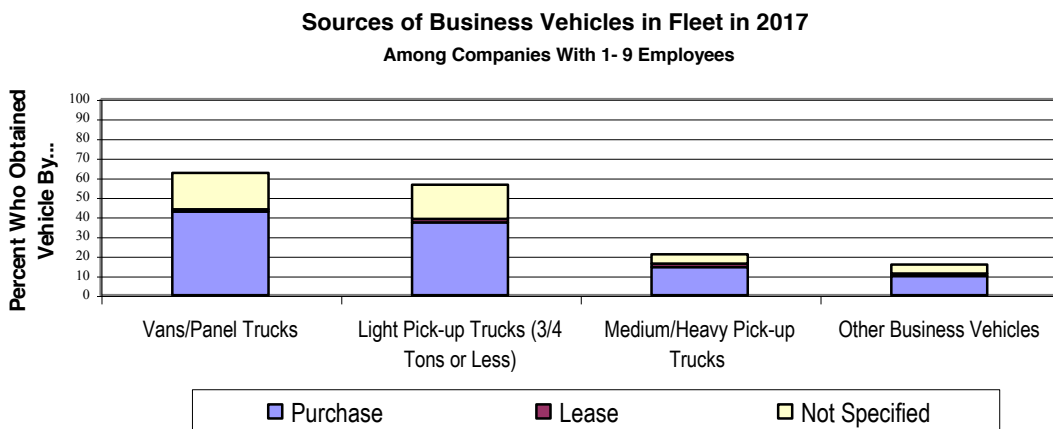
TYPES OF VEHICLES IN BUSINESS FLEET (Trended) by Source of Revenue				
	Residential		CII	
	2017	2015	2017	2015
	(92)	(169)	(90)	(136)
	%	%	%	%
Vans and Panel Trucks	68>	57	61	62
Light Pick-Up Trucks	48	52	69	72
Medium/Heavy Pick Up Trucks	18	14	40	42
Other Business Vehicles	15	16	19	18
Any Business Vehicles	97>	89	91	91

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

Sources of Business Vehicles in Fleet

Among companies with 1-9 employees, the vast majority of vehicles were obtained through purchase.

Similarly, companies with 10+ employees are also most likely to own rather than to lease or rent, however, they lease or rent at higher rates than smaller companies. (This latter comes at the expense of “not specified”; they also purchase at higher rates than do smaller companies.)



Average Number of Business Vehicles in Respondent's Fleet: 2017

The 214 respondents who participated in this part of the survey reported having a combined business fleet of almost 1593 vehicles in 2017 (not shown).

- The average number of vehicles for each category and in total is statistically unchanged compared with two years earlier.

Average Number of Business Vehicles in Respondent's Fleet: 2017

VEHICLES IN BUSINESS FLEET (2017 Vs. 2015 and 2013)					
	2017		In 2015		In 2013
	(214)		(363)		(372)
	#		#		#
Vans/Panel Trucks	4.1 ^[6.3]	=	3.9 [8.8]	=	3.7 [6.9]
Light Pick-up Trucks (3/4 Tons or Less)	5.3 ^[19.7]	=	5.9 [27.1]	=	5.0 [17.3]
Medium/Heavy Pick-up Trucks	2.7 ^[3.1] **	=	2.6 [2.8] **	=	3 [4] **
Other Business Vehicles	1.9 ^[2.4] **	=	1.9 [2.5] **	=	2 [3] **
Total **	5.2 ^[7.1] **	=	4.7 [6.2] **	=	5.2 ^[7.1] **

** In the cases of Medium/Heavy Pick-up Trucks, Other Business Vehicles and Total Vehicles, in the 2016 Profile Study (reporting on 2015 results), we used a mean that excludes 50+ vehicles. This was done out of caution and to reduce the level of uncertainty around estimates since these means that included 50+ vehicles were very large particularly in comparison to 2013 results. To be comparable, the 2013 means for Medium/Heavy Pick-Up Trucks, Other Business Vehicles and Total Business Vehicles that are shown above now based on excluding 50+ Vehicles and will not match the means shown in the 2014 Profile Breakout Report. We repeated the methodology for comparability in reporting the 2017 results.

Numbers in [] are standard deviations which are used in stat testing means over time

Number of Business Vehicles in Respondent's Fleet by Key Subgroups

Larger electrical contracting firms are more likely to have higher numbers of each of the vehicles included in the survey, and by extension, to have a significantly higher average number of vehicles compared with firms with 1-9 employees. This finding is unchanged compared with two years ago (not shown).

In a similar vein, firms that work primarily on Commercial, Industrial and Institutional (CII) construction are more likely to own Van/Panel trucks, Light Pick-Ups and Medium/Heavy Pick-Ups as well as having significantly more vehicles, on average in their fleet compared to firms that work primarily on Residential construction. This finding is unchanged compared with two years ago (not shown).

Number of Business Vehicles in Respondents Fleet by Subgroups					
		Number of Employees		Revenue is Primarily From	
2017	Total	1-9	10+	Residential	CII
	(214)	(157)	(57)	(92)	(90)
	#	#	#	#	#
Vans/Panel Trucks	4.1 ^[6.3]	1.7	<10.1	2.4	<6.0
Light Pick-up Trucks (3/4 Tons or Less)	5.3 ^[19.7]	1.6	<14.3	1.7	<8.7
Medium/Heavy Pick-up Trucks**	2.7 ^[3.1] **	2.0	<3.8	1.4	<3.0
Other Business Vehicles **	1.9 ^[2.4] **	1.2	<3.7	1.9	1.5
Total **	5.2 ^[7.1] **	2.6	<14.1	2.4	<7.4

** Mean is based on excluding 50+ vehicles (see note on previous page)

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow. For further emphasis, the smaller numbers are shown in *italics*.

Total Vehicles in Fleet -- All Industry Estimate

Number of Vehicles in Fleet:

The 214 companies that responded to this portion of the survey, by themselves, reported having a total fleet of 1593 (not shown).

Based on the survey, ELECTRICAL CONTRACTOR magazine estimates that the universe of electrical contractors had a total fleet of between about **296,000 and 408,000 vehicles in 2017 at the 90% level of confidence.**^x

2017 Total Vehicles in Fleet – All Industry Estimate EXCLUDING FIRMS WITH 50+ VEHICLES					
	Average Number of Vehicles Per Firm	Percent of EC Firms With Vehicles in Fleet	Number of EC Firms (Source: 2016 CBP)	Number of EC Firms with Vehicles in Fleet	Estimated Number of Vehicles in Fleet
Vehicles in Fleet		%			
Mean	5.2	93%	72,784	67,689	351,983
Upper Estimate	6.025	93%	72,784	67,689	407,827
Lower Estimate	4.375	93%	72,784	67,689	296,140

^x As noted in the Methodology section, we believe that the actual number of vehicles is closer to the top of the range, or possibly even higher because this mean does not include fleets with more than 50 vehicles owned by a small number of the companies in the survey. This was done in order to achieve a tighter confidence band for the estimate. Further, we do not believe that this estimate includes personal vehicles, so that the actual number of vehicles used for business by electrical contractors may well be even higher than the top of the range.

Plans to Purchase or Lease/Rent Business Vehicles in the Next 1- 3 Years

In the 2018 Profile Study, electrical contractors that participated in this portion of the survey were asked if their company had plans to purchase or lease/rent business vehicles in the next 1 – 3 years.

- As shown below, about one-half of firms are planning a near-term purchase or lease/rental and one-half say that they are not planning to do so.
 - Firms with 10+ employees are almost twice as likely to plan an acquisition (72% vs. 42%). However, there is no difference by primary source of revenue (Residential vs. CII).

This question was first asked in the 2018 Profile Study and therefore cannot be trended.

Whether Firm is Planning to Purchase or Lease Business Vehicles in the Next 1-3 Years					
		Number of Employees		Revenue is Primarily From	
2018 Profile Study	Total	1-9	10+	Residential	CII
	(214)	(157)	(57)	(92)	(90)
	%	%	%	%	%
Yes	49	42	<72	47	53
No	45	52>	24	47	42
No Answer/Not Sure	6	6	5	7	6

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow.